

WHAT IS CLAIMED IS:

1. A data transfer apparatus for connecting buses and for transmitting data transferred through its own bus among the buses to another bus among the buses, if necessary, according to destination information attached to the data, comprising:

transmitting means for determining according to the destination information whether the node serving as the destination of the data is connected to one of the buses, and, when it determines that the node is not connected, for transmitting predetermined error information to the data transmission source.

2. A data transfer apparatus according to Claim 1, wherein the transmitting means determines according to the destination information whether the bus to which the node serving as the destination of the data is connected exists on a network, and when it determines that the bus does not exist, transmits predetermined error information to the data transmission source.

3. A data transfer apparatus according to Claim 1, wherein the data transfer apparatus is connected to the another bus through another data transfer apparatus, and the

data transfer apparatus comprises transfer means for transferring the data from the data transfer apparatus to the another data transfer apparatus according to the destination information.

4. A data transfer apparatus according to Claim 1, wherein the data transfer apparatus is formed of an IEEE-1394 bridge conforming to the BRAN specification.

5. A network system in which a plurality of buses are connected through a data transfer apparatus for connecting buses and for transmitting data transferred through its own bus among the buses to another bus among the buses, if necessary, according to destination information attached to the data,

wherein the data transfer apparatus comprises transmitting means for determining according to the destination information whether the node serving as the destination of the data is connected to one of the buses, and, when it determines that the node is not connected, for transmitting predetermined error information to the data transmission source.

6. A network system according to Claim 5, wherein the transmitting means determines according to the destination

information whether the bus to which the node serving as the destination of the data is connected exists on a network, and, when it determines that the bus does not exist, transmits predetermined error information to the data transmission source.

7. A network system according to Claim 5, wherein the data transfer apparatus is connected to the another bus through another data transfer apparatus, and the data transfer apparatus comprises transfer means for transferring the data from the data transfer apparatus to the another data transfer apparatus according to the destination information.

8. A network system according to Claim 5, wherein the data transfer apparatus is formed of an IEEE-1394 bridge conforming to the BRAN specification.

9. A data transfer method for a data transfer apparatus for connecting buses and for transmitting data transferred through its own bus among the buses to another bus among the buses, if necessary, according to destination information attached to the data, the data transfer method comprising:

a first step of determining according to the

destination information whether the node serving as the destination of the data is connected to one of the buses; and

a second step of, when it is determined that the node is not connected, transmitting predetermined error information to the data transmission source.

10. A data transfer method according to Claim 9, wherein, in the second step, it is determined according to the destination information whether the bus to which the node serving as the destination of the data is connected exists on a network, and, when it is determined that the bus does not exist, predetermined error information is transmitted to the data transmission source.

11. A data transfer method according to Claim 9, wherein the data transfer apparatus is connected to the another bus through another data transfer apparatus, and the data is transferred from the data transfer apparatus to the another data transfer apparatus according to the destination information.

12. A data transfer method according to Claim 9, wherein the data transfer apparatus is formed of an IEEE-1394 bridge conforming to the BRAN specification.